



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,732	07/16/2003	Michael Weiland	N0169 US	9034

37583 7590 03/29/2005

NAVIGATION TECHNOLOGIES  
222 MERCHANDISE MART  
SUITE 900, PATENT DEPT.  
CHICAGO, IL 60654

EXAMINER

TO, TUAN C

ART UNIT PAPER NUMBER

3663

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/620,732

Applicant(s)

WEILAND ET AL.

Examiner

Tuan C To

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 17-21 and 26-28 is/are allowed.  
6) ☒ Claim(s) 1,6,7,12-14,16,22,24 and 25 is/are rejected.  
7) ☒ Claim(s) 2-5,8-11,15 and 23 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The examiner has found none of the teachings in the specification of the present invention include the teachings of "clothoid" and "spline" as now claimed in claims 13 and 14.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 3663

Claims 1, 6, 7, 12, 16, 22, 24, and 25 are rejected under 35 U.S.C. 102(a) as being anticipated by Casino (US 6850841B1).

With respect to claim 1, the US reference to Casino discloses a method and system for obtaining lane data, comprising the step of storing the data that represent road lane in a geographic database (30). Referring to figure 3, each road segment data record (34) associates with the information such as attributes, fields that describes features of the represented road segment (Casino, column 3, lines 35-41). Each road segment has been associated with two nodes (22), one node represents the start and another node represents the end of the road segment (Casino, column 2, lines 52-67, column 3, lines 1-5). ). Thus, the teachings of Casino read on the limitation "associating with reach data representation of a physical road lane data indicating start and end points of the represented physical road lane. Casino further discloses that the physical features such as lane (218) is adjacent to and extend along the physical road lane (220) from the left, and the median (222) is adjacent to and extend along the physical road lane (220) from the right (Casino, figure 14). Thus, the teachings of Casino read on the limitation: "data indicating what linearly extending physical features are adjacent to and extend along the represented physical road lane on a right and a left side".

With regard to claim 6, Casino shows a multi-lane road segment, in which the shoulder, stayed in between the center line (48) and lane (44), is a physical feature which is adjacent and extend along the road lane (44).

Art Unit: 3663

With regard to claim 7, Casino shows a multi-lane road segment, in which the shoulder, stayed in between the center line (48) and lane (44), is a physical feature which is adjacent and extend along the road lane (44). It should be noted that the mentioned shoulder located on the left side of lane (44) could be a driver surface, where the emergency vehicle can drive on.

With regard to claim 12, Casino teaches that the data representation of a physical road lane indicates a geometry of the physical road lane (Casino, figure 3, 34(5)(2), 34(5)(3).).

With regard to claims 16 and 25, Casino shows a multi-lane road segment in figure 4, including lanes of full width, and lanes are less than full width. The lanes, which are less than full width, are the emergency lanes (or shoulder) which is less than full width.

With respect to claim 22, Casino discloses a system for obtaining lane data, comprising a geographic database (30) that stores the data that represent road lane. Referring to figure 3, each road segment data record (34) associates with the information such as attributes, fields that describes features of the represented road segment (Casino, column 3, lines 35-41). Each road segment has been associated with two nodes (22), one node represents the start and another node represents the end of the road segment (Casino, column 2, lines 52-67, column 3, lines 1-5). ). Thus, the teachings of Casino read on the limitation "associating with reach data representation of a physical road lane data indicating start and end points of the represented physical road lane. Casino further discloses that the physical features such as lane (218) is adjacent to and

Art Unit: 3663

extend along the physical road lane (220) from the left, and the median (222) is adjacent to and extend along the physical road lane (220) from the right (Casino, figure 14). Thus, the teachings of Casino read on the limitation: "data indicating what linearly extending physical features are adjacent to and extend along the represented physical road lane on a right and a left side".

With regard to claim 24, Casino discloses that the database discussed above may be used on various kinds of computing platforms such as vehicle navigation systems, and hand-held portable navigation system, personal computer, and other kinds of devices. Thus, Casino inherently discloses the limitation: "data representations of physical road lanes are stored on a computer-readable medium".

#### ***Allowable Subject Matter***

Claims 17-21, and 26-28 remains in a condition for allowance.

Claims 2-5, 8-11, 15, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 6, 7, 12, 16, 22, 24, and 25 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3663

### ***Conclusions***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.

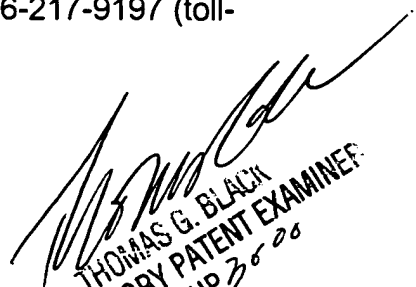
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/tc

March 9, 2005

  
THOMAS G. BLACK  
SUPERVISORY PATENT EXAMINER  
GROUP 3626